Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the above-

referenced application.

Listing of Claims:

What is claimed is:

1. (Original) A process for preparing a particulate solid material comprising the steps of:

(a) obtaining a paper-fibre waste solid material having a ratio of china clay, or equivalent,

to chalk, or equivalent, greater than a pre-determined minimum;

(b) treating the material to reduce the moisture content and form a granular material; and

(c) calcining the granular material at a temperature of approximately 1300°C or higher to

provide a particulate, 100% solids, material.

2. (Original) A process as claimed in claim 1 wherein the paper-fibre waste solid material is

non-hazardous waste material arising from the recycling of waste paper and tissue.

3. (Original) A process as claimed in claim 2 wherein the paper-fibre waste solid material is in

the form of sludge.

4. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the paper-fibre waste solid material has a moisture content of over 45%.

5. (Original) A process as claimed in claim 4 wherein the paper-fibre waste solid material has a

moisture content of over 55%, optionally 60%.

Page 3 of 9

6. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein minor components in the paper-fibre waste solid material including non-fibrous

contraries materials are removed prior to step (b).

7. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the paper--fibre waste solid material is waste paper from a paper making process.

8. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the china clay or equivalent includes any form of hydrated aluminium silicate, including

kandites, kaolins and the like.

9. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the chalk or equivalent includes any form of calcium carbonate, which includes the

forms of limestone.

10. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the process further includes the step of: dewatering the paper-fibre waste solid material

prior to step (b).

11. (Original) A process as claimed in claim 10 wherein the dewatering process provides a

sludge material having a solids content generally in the range 22-55%.

12. (Currently Amended) A process as claimed in claim 1 claim 10 or claim 11 wherein

analysis of the china clay: chalk ratio is carried out prior to the dewatering of the waste material.

13. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the determination of the ratio of the china clay: chalk is carried out using the 'acid

extraction' method.

Page 4 of 9

Express Mail No.: EV853903755US Attorney Docket No.:2006982-0003

Customer No.: 24280

14. (Original) A process as claimed in claim 13 wherein the pre-determined minimum ratio

using the 'acid extraction' method is approximately 0.2.

15. (Currently Amended) A process as claimed in claim 1 any on of claims 1 to 12 wherein the

determination of the ratio of the china clay: chalk is carried out using the 'ash/acid extraction'

method.

16. (Original) A process as claimed in claim 15 wherein the pre-determined minimum ratio

using the 'ash/acid-extraction' method is approximately 0.13.

17. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein a conditioning material is added to the paper-fibre waste solid material in step (a).

18. (Original) A process as claimed in claim 17 wherein the conditioning agent raises the china

clay: chalk ratio above the pre-determined minimum.

19. (Currently Amended) A process as claimed in claim 1 claim 17 or claim 18 wherein the

conditioning material is partly, substantially or wholly china clay, or at a china clay suspension,

or another silicate material.

20. (Currently Amended) A process as claimed in claim 1 any one of claims 17 to 19 wherein a

dispersing agent is added with the conditioning agent.

21. (Currently Amended) A process as claimed in claim 1 any one of claims 17 to 20 wherein the

material has a solids content of less than 45%, optionally 22% or lower.

4104955v1

22. (Currently Amended) A process as claimed in <u>claim 1</u> any one of the preceding claims wherein the ratio of silica and aluminium to natural fillers in the paper-fibre waste solid material

is also determined.

23. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the treatment step (b) includes compression and/or extrusion of the material.

24. (Original) A process as claimed in Claim 23 wherein step (b) is carried out by a granulating

press.

25. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the treatment step (b) is provided by direct heat contact.

26. (Original) A process as claimed in claim 25 wherein a heat transfer material is used.

27. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the treatment step (b) is carried out with agitation.

28. (Original) A process as claimed in claim 27 wherein the agitation is provided by a rotary

apparatus.

29. (Original) A process as claimed in claim 28 wherein the rotary apparatus is inclined.

30. (Currently Amended) A process as claimed in claim 1 elaim 28 or claim 29 wherein the

rotary apparatus allows for a wholly or substantially continuous feed of material.

31. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the treatment step (b) is carried out at a raised temperature, optionally between 60-80°C.

Page 6 of 9

32. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein step (b) is carried out under an inert atmosphere.

33. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the granular material provided by step (b) comprises granules in the range 3mm-30mm

in size.

34. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the granular material formed by step (b) is reduced in size, optionally by grinding or

milling.

35. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the granular material formed by the treatment step (b) has a solids content in the range

of approximately 45-90% solids.

36. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the calcining of the granular material reduces the moisture in the material wholly or

substantially to zero.

37. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein particulate material being formed by step (c) is partly or substantially porous.

38. (Currently Amended) A process as claimed in claim 1 any one of the preceding claims

wherein the granular material is calcined with agitation.

39. (Original) A process as claimed in claim 38 wherein the agitation is provided by a rotary

apparatus.

- 40. (Original) A process as claimed in claim 39 wherein the rotary apparatus is a high temperature rotary furnace tube.
- 41. (Currently Amended) A process as claimed in <u>claim 1</u> any one of the preceding claims wherein the calcining temperature is greater than 1300°C, optionally approximately 1320°C, or optionally higher.
- 42. (Currently Amended) A particulate solid material whenever prepared by a process as defined in <u>claim 1</u> any one of claims 1 to 41.
- 43. (Original) A particulate solid material formed from a paper-fibre waste solid material having a bulk density of less than 1,000kg/m³, preferably in the range 560kg/m³ to 800kg/m³, and in the form of an aggregate having a mean particle size in the range 3 to 15mm.
- 44. (Currently Amended) A particulate solid material as claimed in <u>claim 1 elaim 42 or elaim</u>
 42 being a light-weight aggregate for making cementitious, concrete or other building blocks.
- 45. (Currently Amended) A particulate solid material as claimed in <u>claim 1 elaim 42 or elaim</u>
 43 having a particle size of less than 100pm, and being a cementitious material.